

REMARKS/ARGUMENTS

In the Office Action, claims 1-6, 8, 10-20 and 26-30 have been rejected.

I. Interview

Applicant would like to thank Examiner Nguyen for the interview of January 9, 2008.

During the interview, Applicant and the Examiner discussed Galvanauskas et al. (U.S. Patent No. 6,208,458). The Examiner agreed with Applicant that the present invention is patentable over the Galvanauskas reference. The Examiner suggested that Applicant submit a response reflecting the same and that the 102 reference would be withdrawn in due course. The Examiner also stated that a further search would be needed before the case will be allowed.

II. Claim Rejections Under 35 U.S.C. § 102

Claims 1-6, 8, 10-20 and 26-30 have been rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Galvanauskas et al. (U.S. Patent No. 6,208,458).

Applicant respectfully disagrees with the above rejection for the reasons pointed out below.

Independent claim 1 recites:

“A laser device having a laser medium in a resonator cavity comprising:

a) means for pumping energy into said laser medium to increase gain of said laser device;

b) **active Q-switch means** having open and close states for controlling loss modulation of said resonator cavity; **and**

c) **passive Q-switch means** for further controlling loss modulation of said resonator cavity, wherein loss modulation control from active and passive Q-switch means enable generation of a short width, high peak power pulse at a lasing wavelength.” (Emphasis Added).

Claims 16 and 26 contain similar imitations.

As claimed, the present invention utilizes the advantages of both an active Q-switch and a passive Q-switch. That is, the active Q-switch has open and close states for controlling loss modulation of said resonator cavity and the passive Q-switch means also controls loss modulation of said resonator cavity. This combination of loss modulation control enables generation of a short width, high peak power pulse at a lasing wavelength.

The Examiner alleges that Galvanauskas teaches a laser device having an active Q-switch means and a passive Q-switch means. Galvanauskas, however, has two methods to control losses -- active Q-switching (Fig. 4(b)) and passive Q-switching (Fig. 4(a)). In either case, an externally synchronizable laser, such as, e.g., a fast-tuned laser diode, is used as a source of stretched broad-bandwidth pulses. This laser diode is then triggered by **either** a passively **or** actively Q-switched laser with negligible timing jitter. (Col 11, lines 15-24; and Figs. 4(a-b)). Galvanauskas does not disclose a laser device that includes **both** an active Q-switch and a passive Q-switch.

Anticipation requires the presence in a single prior art reference, disclosure of **each and every element** of the claimed invention, arranged as in the claim. (Lindeman Maschinenfabrik GMBH v. American Hoist and Derrick Company, 730 F.2d 1452, 1458, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). And since, Galvanauskas fails to teach, among other elements of the claim, a laser device that includes both an active Q-switch and a passive Q-switch, Galvanauskas *cannot* anticipate claims 1, 16 and 26 of the present invention.

Claims 2-6, 8, 10-15, 17-20 and 27-30 are dependent on independent claims 1, 16 and 26, therefore, these dependent claims incorporate all the limitations of their respective independent claim and recite additional unique elements and/or limitations. Accordingly, these dependent claims remain patentable over Galvanauskas.

In view of the above, Applicant respectfully requests withdrawal of the 35 U.S.C. § 102(b) rejection of claims 1-6, 8, 10-20 and 26-30 as being allegedly anticipated by Galvanauskas.

III. Conclusion

In view of the aforementioned remarks and amendments, the Applicant believes that each of the pending claims is in condition for allowance. Accordingly, Applicant respectfully requests allowance of claims 1-6, 8, 10-20 and 26-30. If, upon receipt and review of this amendment, the Examiner believes that the present application is not in condition for allowance and that changes can be suggested which would place the claims in allowable form, the Examiner is respectfully requested to contact Applicant's undersigned counsel at the number provided below.

The Director is hereby authorized to charge any necessary fees that may be associated with this filing, or credit any overpayment of same, to Deposit Account No. 03-1250 (Ref. No. 040017U0008a), Customer No. 43, 309.

Respectfully submitted,

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